General Biological Surveys and Focused Surveys for Burrowing Owl and Desert Tortoise for the Pioneertown Motel Expansion

San Bernardino County, CA

United States Geological Survey (USGS) 7.5-minute quadrangle Yucca Valley North, CA
Township 1 North, Range 5 East, Section 19

Assessor's Parcel Numbers:
Parcel A: APN 0594-212-30
Parcel A.1: APN 0594-212-38
Parcel B: APN 0594-212-29
Parcel C: APN 0594-212-28
Parcel D: APN 0594-212-27

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Executive Summary

The proponent, Pioneertown Motel, LLC, is proposing to expand the existing Pioneertown Motel from its current parcel of 2.33 acres onto three additional parcels to the north, for a total development area of 6.11 acres. The existing motel structures are located on a parcel with various trees and ornamental landscaping plants. The adjacent parcel to the north is a graded parking area (1.26 acres) with numerous landscaping trees and shrubs. The two additional parcels on the north end of the property (totaling approximately 2.5 acres), are characterized by fragmented Joshua tree woodland, which would be largely cleared of its understory for the motel expansion.

The property is located within potential habitat for burrowing owl (*Athene cunicularia*) and desert tortoise (*Gopherus agassizii*). Burrowing owl is listed as a Species of Special Concern by the California Department of Fish and Wildlife (CDFW). Desert tortoise is listed as federally Threatened under the Endangered Species Act (ESA) and as Threatened by the state of California Endangered Species Act (CESA). Focused surveys for burrowing owl and desert tortoise were conducted on May 31, 2020, coinciding with the nesting season for burrowing owl, the active season for tortoise, and the general nesting season for birds.

No burrowing owls or desert tortoises were observed during surveys, and no sign was noted. Neither species are currently present on the site and there is no evidence of their recent occupation. Nesting bird surveys revealed evidence of nesting activity on site, including active and inactive nests. Joshua trees (*Yucca brevifolia*), cacti, and catclaw acacias (*Senegalia greggii*) were present on the site; these plants are subject to state and county desert plant protection ordinances. No other additional sensitive plants or animals, or their sign, were observed on-site.

Prior to construction, 30-day burrowing owl surveys are recommended to ascertain that no owls have moved onto the site, along with nesting bird surveys immediately prior to ground disturbance activities (if construction begins during the nesting season). While focused desert plant surveys during the blooming season could be used to confirm whether any sensitive plants are present on-site, the general vegetation surveys and literature review presented in this report suggest a low probability of sensitive plants occurring on-site.

The main biological impact of this project is a loss of the fragmented Joshua tree woodland habitat on the property. Clearing the vegetation will result in a loss of foraging and nesting habitat for birds, habitat for snakes and lizards, a decrease in vegetative cover, and potential loss of some of the Joshua trees, depending on project site plans. However, the biological impacts of this project are relatively minor, as the vegetated area to be cleared is about 2.52 acres and is already surrounded by human disturbance on semi-rural land.

1.0 Project Introduction

1.1 Project Location and Proposed Development

Pioneertown Motel, LLC, is proposing to expand the existing Pioneertown Motel from its current parcel onto three additional parcels to the north, yielding a total project area of approximately 6.11 acres (Table 1). The five parcels of private land detailed in this report include the two developed parcels of 2.33 acres total where the Pioneertown Motel is currently located, and three undeveloped parcels of about 1.26 acres each that are directly north of the motel (Figure 1). The properties are located in Pioneertown, an unincorporated, rural community of approximately 420 people. Pioneertown is located on the Yucca Valley North, CA U.S. Geological Survey (USGS) 7.5 Minute Quadrangle Map in Township 1 North, Range 5 East, Section 19 at an elevation of 4,250 feet Mean Sea Level (Figure 2). This report follows the proponent's site plan (Figure 3) in labeling the properties as Parcels A, B, C and D. The labels correspond as follows:

Table 1. Project Site Parcel Descriptions

Parcel	APN	Approximate Acreage	Current Use 05/31/2020
A	0594-212-30	1.83	Current motel site
A.1	0594-212-38	0.50	Small strip of land about 40 ft. wide bordering north and east edge of parcel A
B	0594-212-29	1.26	Graded parking area
C	0594-212-28	1.26	Fragmented Joshua tree woodland
D	0594-212-27	1.26	Fragmented Joshua tree woodland

Parcel A is the site of the current Pioneertown Motel; the address is 5240 Curtis Road in Pioneertown, CA. Parcel A and parcel A.1 are collectively referred to as "parcel A" for the purposes of this report. Parcel A.1 is a small L-shaped strip of private land about 40 feet wide bordering the northern and eastern edge of parcel A.

Parcel A is north of Pioneertown Road, which is paved. It lies directly between Mane Street to the south and Rawhide Road to the north, and is bordered by Curtis Road to the east (all three of these roads are dirt). Parcel A is adjacent to commercial establishments to the west and south, including a restaurant/music venue and shops that occupy a collection of buildings modeled to represent a historic town, which has been used for filming Old Western themed movies. Parcels B, C, and D are located north of Rawhide Road and are also bordered by Curtis Road to the east, and by an unnamed dirt road to the west (Figure 1). The land to the west, north and east of parcels B, C, and D is private residential land. These surrounding lands support scattered Joshua trees (*Yucca brevifolia*) and some native vegetation, but they have undergone a significant amount of human modification including houses, outbuildings, landscaping, fencing, and graded dirt roads.

The proposed motel expansion would include construction of single-story rooms and cabins, along with a restaurant, multiuse event building, outdoor pool, spa, retail space, equestrian area, parking, and other smaller buildings (Figure 3). For the purposes of this report, the use of the terms “project area”, “property”, and “site” will refer to all five parcels together as a unit proposed for development.

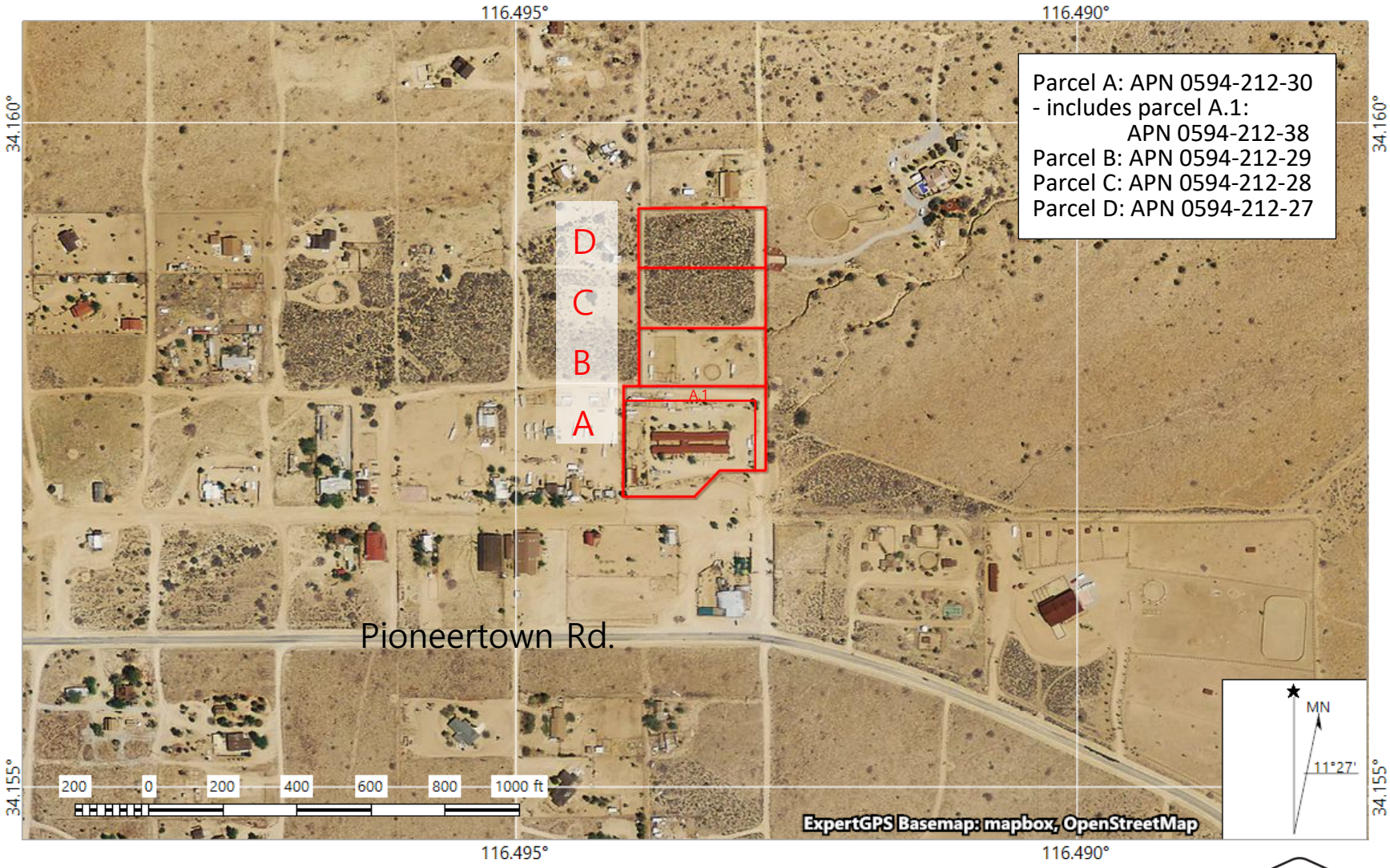
1.2 Project Site Description

Parcel A is dominated by cottonwood trees (*Populus fremontii*), Mondell pines (*Pinus eldarica*), catclaw acacia (*Senegalia greggii*), and both native and non-native landscaping plants around the motel. The motel buildings are more than 70 years old, and consequently most of the landscaped trees and shrubs are mature and established features of the property. Parcel B, just north of the existing motel, is largely cleared of vegetation. It is currently used as a parking and gathering area for outdoor presentations on a small performance stage. It contains four mature Joshua trees and a number of native and non-native ornamental plants landscaped around the small stage. Parcels C and D can be characterized as mostly undisturbed fragments of Joshua Tree Woodland Alliance habitat, with an understory dominated by blackbrush (*Coleogyne ramosissima*), ephedra (*Ephedra* spp.), silver cholla (*Cylindropuntia echinocarpa*), and catclaw acacia (Sawyer et al. 2009). Scattered trash occurs throughout parcels C and D, but there are no significant dump sites, and few signs of historic ground disturbing human activities.

The soil on the project site is a gravely sandy loam with no significant rocks or cobble; the topography is relatively flat. There are no natural above-ground water resources (ponds, streams, springs, etc.). The nearest USGS designated blue-line stream is approximately 250 meters to the northeast of the project property, and drains into the larger Chaparrosa Wash system (Figure 2). There are no blue-line streams on the property. At the time of the survey, it appeared that runoff resulting from natural precipitation on parcel A drains across the southeast corner of parcel B, as evidenced by a small eroded channel about one foot deep and 70 feet long. The water flows across Curtis Road, and into the area around a small drainage. The drainage connects to the blue-line stream, but is likely the result of historic human drainage modification. It is also probable that the irrigation for the motel landscaping has contributed to the eroded area on parcel B.

The project area is located within a semi-rural landscape with potential habitat for burrowing owl (*Athene cunicularia*) and tortoise (*Gopherus agassizii*). Burrowing owl is listed as a Species of Special Concern by the California Department of Fish and Wildlife (CDFW). The desert tortoise is listed as federally Threatened under the Endangered Species Act (ESA) and Threatened by the state of California Endangered Species Act (CESA). In order to determine whether these two species were present on the site, focused surveys for burrowing owl and desert tortoise were conducted on May 31, 2020. The surveys were performed during the nesting season for burrowing owl and the active season for tortoise. Additionally, a general biological assessment of the site was also completed, which included nesting bird surveys and a general inventory of plants and animals observed on the properties.

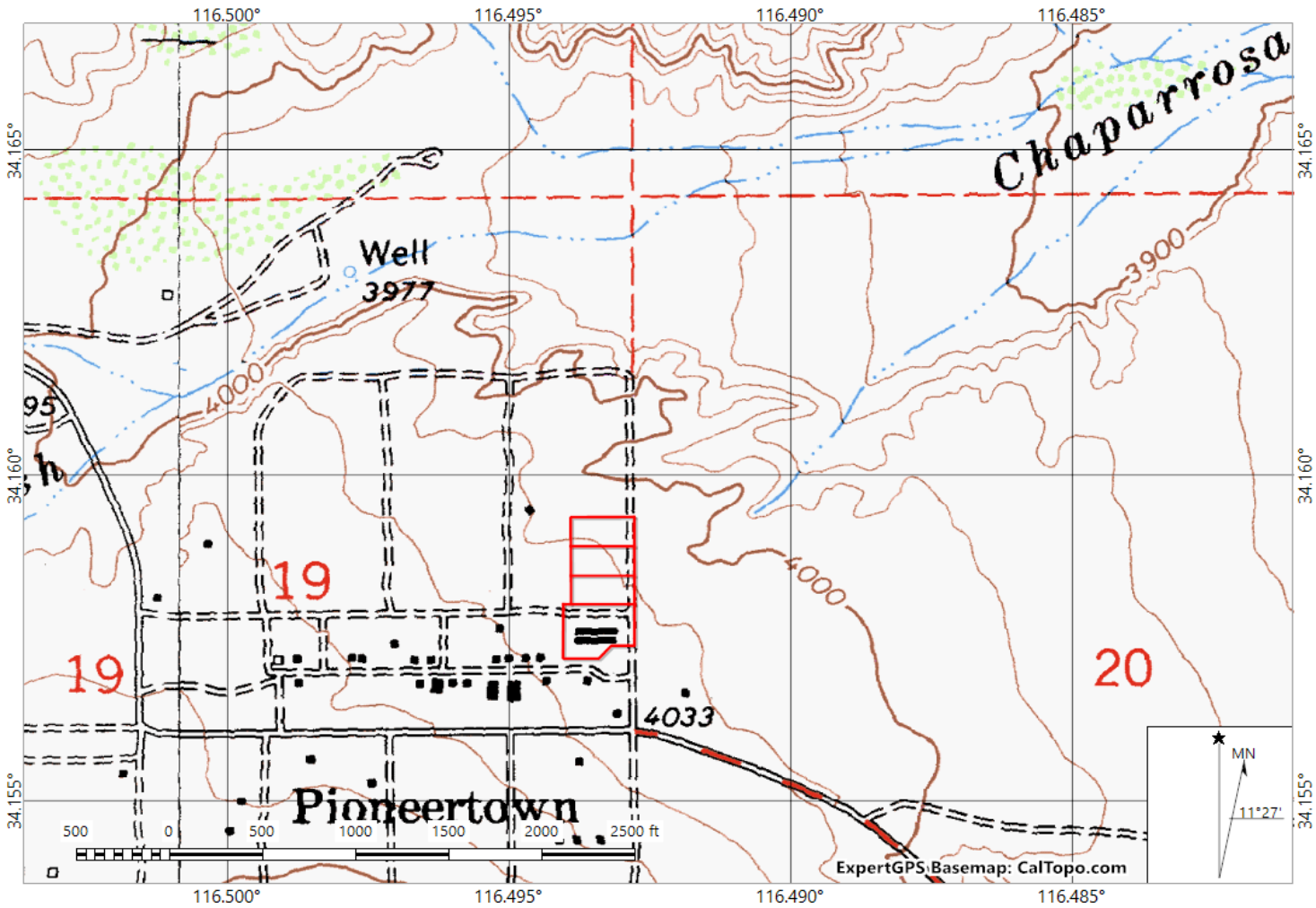
Figure 1.



Aerial Map of Pioneertown Motel Expansion
Parcels A, B, C, D

Pioneertown, CA

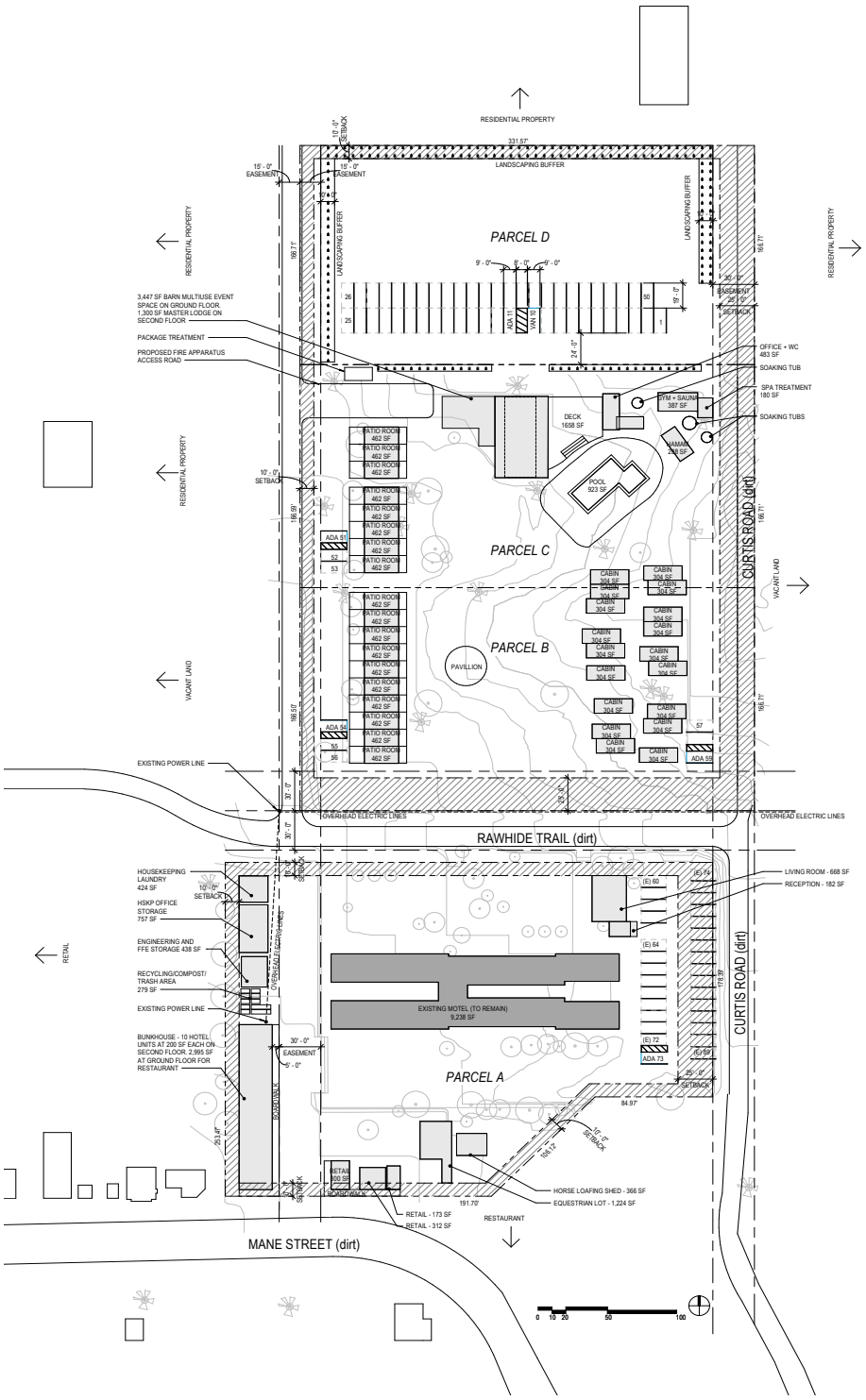
Figure 2.



USGS 1:24,000 Topographic Map of Pioneertown Motel Expansion

Pioneertown, CA

Figure 3.



Site Plan of Pioneertown Motel Expansion Parcels A, B, C, D

Pioneertown, CA

LOESCHER MEACHEM ARCHITECTS
353 S. BROADWAY SUITE 201
LOS ANGELES, CALIFORNIA 90013

2.0 Literature Review

2.1 Burrowing Owl

The burrowing owl is a ground-dwelling, diurnally active owl found primarily in arid habitats with open ground and few shrubs (Plumpton and Lutz 1993, Rosenburg et al. 2007). During the breeding season, it makes use of abandoned mammal and tortoise burrows to nest and raise its young (Gervais et al. 2008). Its diet consists of insects and small mammals, and it nests during the spring months in the Mojave Desert region (Rosenburg et al. 2007). In the past half century, burrowing owl populations have declined sharply across much of their range, and although it is not afforded protected status under federal laws, it is listed for special status in 9 of the 18 western states in which in it occurs (Poulin et al. 2020).

In California, the burrowing owl is considered a Species of Special Concern (SSC) by the California Department of Fish and Wildlife (CDFW). Biological surveys for owl presence are recommended before potential habitat is disturbed or developed (CDFG 2012). The nearest burrowing owl sighting in the CNDDB system is approximately ten miles from the site. However, the database is not exhaustive and the project site is located within the known range of this species. As burrowing owls are highly mobile animals, it is likely that they are present closer to the site than indicated by the CNDDB search.

2.2 Desert Tortoise

The Mojave desert tortoise is an herbivorous reptile with a historic range north and west of the Colorado River drainage, throughout the Mojave Desert in portions of Arizona, Utah, Nevada and southeast California. It is considered a separate species from desert tortoises native to the deserts elsewhere in Arizona and northern Mexico (Murphy et al. 2011). The tortoise has been recorded in a range of habitats, spanning saltbush (*Atriplex* spp.) communities along dry lake beds at elevations near mean sea level, to gravel and rocky uplands characterized by Joshua trees and junipers. However, the highest densities of Mojave desert tortoise are associated with creosote (*Larrea tridentata*) bush scrub communities between elevations of approximately 1,000-4,000 feet above mean sea level. In these areas, tortoises are typically found to be most abundant on gently sloping alluvial fans of cobble, gravel, and sandy loam, and washes of sandy-gravelly soils (Germano et al. 1994, USFWS 2011).

The desert tortoise was listed under the California Endangered Species Act (CESA) as Threatened by the California Fish and Game Commission (CFGC) in 1989, in response to population declines and trends in habitat degradation throughout the Mojave Desert. In 1990, the desert tortoise was also listed as Threatened under the Endangered Species Act (ESA) by the U.S. Fish and Wildlife Service (USFWS). The ESA prohibits the “take” of a listed species, wherein “take” is defined as to “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct” (16 U.S.C. § 1532(19)).

The project site is within the range for desert tortoise, with a moderate habitat potential index (Nussear et al. 2009, USFWS 2011). However, there have been no CNDDB-recorded desert tortoise observations in the town center area of Pioneertown; the two nearest observations (from 1988 and 1994) are more than 1.5 miles from the site (CNDDB 2020). Additionally, the project site is not located within U.S. Fish and Wildlife designated desert tortoise critical habitat. The nearest designated critical habitat is 26 miles to the south-east in the Pinto Mountains (CNDDB 2020).

2.3 Additional Species

In a review of other sensitive species, none appeared to be highly likely to occur on the project site. Some special status birds such as prairie falcons (*Falco mexicanus*) and golden eagles (*Aquila chrysaetos*) could be observed in the area, but would not nest on the project site due to unsuitable nesting substrate and proximity to human activity. The most likely sensitive bird species that might nest on-site would be the loggerhead shrike *(Lanius ludovicianus)* or Le Conte's thrasher (*Toxostoma lecontei)*.

Agency data repositories and pertinent literature were reviewed to generate a list of sensitive species with the potential to occur on or near the project site. The following sources were consulted and queried: the CDFW Biogeographic Information System (BIOS), the California Natural Diversity Database (CNDDB), the USFWS Environmental Conservation Online System (ECOS), and the California Native Plant Society Inventory of Rare and Endangered Plants. The results are detailed in Table 2 below.

Table 2. Sensitive Species with Potential to Occur in Project Area

Scientific Name	Common Name	Status	Habitat	Likelihood of Occurrence
PLANTS				
Astragalus bernardinus	San Bernardino milk-vetch	CNPS List 1B.2 BLM S USFS S	Pinyon juniper, Joshua tree woodland; granitic or carbonate substrate	Unlikely due to substrate preference, most recent CNDDB observation in vicinity of site from 1993
Berberis fremontii	Fremont barberry	CNPS List 2B.3	Pinyon juniper, Joshua tree woodland; rocky or sometimes granitic substrate	Unlikely due to substrate preference, large perennial shrub not observed on site
Boechera dispar	pinyon rockcress	CNPS List 2B.3	Pinyon juniper woodland, Joshua tree woodland, Mojave desert scrub; granitic, gravelly slopes & mesas	Unlikely due to substrate preference
Boechera shockleyi	Shockley's rockcress	CNPS List 2B.2 USFS S	Pinyon juniper woodland; on ridges, rocky outcrops, openings on limestone/quartzite	Unlikely due to substrate/habitat preference
Calochortus palmeri var. palmeri	Palmer's mariposa-lily	CNPS List 1B.2 BLM S USFS S	Meadows and seeps, chaparral, lower montane coniferous forest	Site is out of elevational and habitat range for this species
Erigeron parishii	Parish's daisy	Fed threatened CNPS List 1B.1	Pinyon juniper woodland, Mojave desert scrub; often on carbonate, limestone mountain slopes, often associated with drainages, sometimes on granite	Unlikely due to substrate preference
Linanthus bernardinus	Pioneertown linanthus	CNPS List 1B.2	Pinyon juniper woodland, Joshua tree woodland, mixed scrub; in gravelly granitic soils; most observances noted in Sawtooth Mountain range	Unlikely due to substrate preference

Linanthus maculatus ssp. maculatus	Little San Bernardino Mtns. linanthus	CNPS List 1B.2 BLM S	Joshua tree woodland, Mojave desert scrub, desert dunes, Sonoran desert scrub; sandy substrate- often in wash or bajada.	Unlikely due to substrate preference
Monardella robisonii	Robison's monardella	CNPS List 1B.3 BLM S	Pinyon juniper woodland; rocky desert slopes, often among granitic boulders.	Unlikely due to substrate/habitat preference
Saltugilia latimeri	Latimer's woodland-gilia	CNPS List 1B.2 BLM S USFS S	Pinyon juniper woodland, Mojave desert scrub, chaparral; rocky or sandy substrate, sometimes in washes or limestone	Unlikely due to substrate/habitat preference
Streptanthus campestris	southern jewelflower	CNPS List 1B.3 BLM S USFS S	Pinyon juniper woodland, chaparral, lower montane coniferous forest; open, rocky areas	Unlikely due to substrate/habitat preference
BIRDS				
Aquila chrysaetos	golden eagle	CDFW FP CDFW WL BLM S USFWS BCC	Nests on cliffs and tall trees near open country; found throughout Mojave Desert region	Very unlikely to nest near human population center; nesting habitat unsuitable
Asio otus	long-eared owl	CDFW SSC	Riparian woodlands	Very unlikely to nest on site due to proximity of human activity and distance to riparian habitat
Athene cunicularia	burrowing owl	CDFW SSC BLM S USFWS BCC	Open grasslands, deserts, and scrublands characterized by low-growing vegetation	Unlikely due to dense understory brush and lack of suitable burrows; see details in this report
Buteo swainsoni	Swainson's hawk	CA Threatened BLM S USFWS BCC	Migrant through Mojave Desert region; forages in open country	Very unlikely to nest; possible migrant through area
Dendroica petechia brewsteri	yellow warbler	CDFW SSC USFWS BCC	Nests in riparian areas; infrequently found in low numbers in Mojave Desert region	Very unlikely; no suitable habitat

Falco mexicanus	prairie falcon	CDFW WL USFWS BCC	Dry, open country, including arid woodlands; nests in cliffs	Very unlikely; no suitable nesting habitat on site
Lanius ludovicianus	loggerhead shrike	CDFW SSC USFWS BCC	Open areas with perches	Possible, but unlikely to nest on site due to proximity of human activity
Spizella breweri	Brewer's sparrow	USFWS BCC	Nests in open meadows, sage brush; migrant through Mojave Desert region	Possible migrant in region
Toxostoma bendirei	Bendire's thrasher	CDFW SSC BLM S USFWS BCC	Nests in arid brushy habitat often dominated by Joshua trees, cholla	Possible, but not common; unlikely to nest on site due to proximity of human activity
Toxostoma crissale	Crissal thrasher	CDFW SSC BLM S	Nests in dense mesquite in riparian areas	Very unlikely; no suitable habitat
Toxostoma lecontei	Le Conte's thrasher	CDFW SSC BLM S USFWS BCC	Open desert scrub, including Joshua tree scrub	Possible; unlikely to nest on site due to proximity of human activity
REPTILES				
Gopherus agassizii	desert tortoise	Fed threatened CA threatened	Most desert habitats below 5,000 ft.	Low due to fragmented habitat and human impacts surrounding the site; nearest CNDDB occurrence approximately 1.5 mi. away (1988) and 2 mi. away (1994)
Phrynosoma blainvillii	coast horned lizard	CDFW SSC BLM S	Pinyon juniper woodland, desert chaparral, occasionally Joshua tree up to 8,000 ft.	Unlikely, site near edge of range and most recent CNDDB observation in area from 1964
MAMMALS				
Chaetodipus fallax pallidus	pallid San Diego pocket mouse	CDFW SSC	Pinyon juniper, desert wash, desert scrub; sandy, herbaceous areas, usually in association with rocks or coarse gravel	Possible; no individuals observed

Lasiurus xanthinus	western yellow bat	CDFW SSC	Valley foothill riparian, desert riparian, desert wash, palm oasis habitats; roosts in trees, particularly palms; forages over water and among trees	Very unlikely, no suitable habitat present on site
Taxidea taxus	American badger	CDFW SSC	Most shrub, forest, and herbaceous habitats; needs sufficient food, friable soils and open, uncultivated ground	Unlikely due to proximity to human activity; no suitable burrows or sign observed
Vulpes macrotis	desert kit fox	Protected furbearer	Open desert scrub	Possible; unlikely to settle on site due to lack of suitable burrows and proximity to humans; no sign observed on site

Data retrieved from:

California Department of Fish and Wildlife (CDFW). 2020. *California Natural Diversity Database (CNDDB) RareFind*– version 5.2.14 https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx

California Native Plant Society, Rare Plant Program. 2020. *Inventory of Rare and Endangered Plants of California* (online edition, v8-03 0.39). http://www.rareplants.cnps.org

U.S. Fish and Wildlife Service (USFWS). 2020. *USFWS Environmental Conservation Online System (ECOS).* https://ecos.fws.gov/ecp/

Definition of Status from CNDDB web site (2020):

CDFW Status

WL Watch List: This classification is for taxa that were previously SSCs but no longer merit SSC status or which do not meet SSC criteria but for which there is concern and a need for additional information to clarify status.

SSC Species of Special Concern: This classification is for a species, subspecies, or distinct population of an animal native to California that is extirpated from the State, or is listed as Federally-, but not State-, threatened or endangered, or meets the State definition of threatened or endangered but has not formally been listed, or is experiencing serious (noncyclical) population declines or range retractions, or has naturally small populations exhibiting high susceptibility to risk from any factor(s) that could lead to declines that would qualify it for State threatened or endangered status.

FP Fully Protected: This classification was the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Please note that most Fully Protected species have also been listed as threatened or endangered species under the more recent endangered species laws and regulations.

OTHER Status

BLM	Bureau of Land Management (S = Sensitive)
USFS	United States Forest Service (S = Sensitive)
USFWS	United States Fish and Wildlife Service (BCC = Bird of Conservation Concern)

California Native Plant Society (CNPS), Rare Plant Rank

4.2 Plants of limited distribution; fairly threatened in California

3.2 Plants about which we need more information; fairly threatened in California

4.3 Plants of limited distribution; not very threatened in California

3.1 Plants about which we need more information; seriously threatened in California

2B.1 Plants rare, threatened, or endangered in California, but more common elsewhere; seriously threatened in California

1B.1 Plants rare, threatened, or endangered in California and elsewhere; seriously threatened in California

1A Plants presumed extinct in California and rare/extinct elsewhere

1B.2 Plants rare, threatened, or endangered in California and elsewhere; fairly threatened in California

2A Plants presumed extirpated in California, but more common elsewhere

2B.2 Plants rare, threatened, or endangered in California, but more common elsewhere; fairly threatened in California

4.1 Plants of limited distribution; seriously threatened in California

1B.3 Plants rare, threatened, or endangered in California and elsewhere; not very threatened in California

2B.3 Plants rare, threatened, or endangered in California, but more common elsewhere; not very threatened in California

3.3 Plants about which we need more information; not very threatened in California

3.0 Field Survey Methods

3.1 Biological Surveys

All surveys for this report were conducted by Wilder Ecological biologists Liana Harp and Nate Jones. They each have over 10 years of experience in Mojave and Great Basin Desert habitats, and have worked extensively with desert tortoise and burrowing owl. After an initial site visit on May 14, 2020, biological surveys were conducted on May 31, 2020. Surveys were timed to occur during the hours, temperatures and weather conditions that characterize a seasonal active period for the focal species in the existing habitat (Conway et al. 2008, Nussear et al. 2007, Agha et al. 2015).

Surveys were accomplished using protocol belt transects, walking in north-south and east-west directions, to gain 100% visual coverage of the landscape. Relevant observations and features were recorded on paper data sheets and locations were marked using a Garmin™ 66i handheld GPS unit, capable of 3-meter accuracy. Climatological data were measured for each individual survey, and photos were taken of any relevant sign, as well as overviews of general habitat and landscape characteristics.

Buffer areas surrounding the properties were not surveyed, as access was restricted due to private ownership. Properties to the north and west are characterized by rural residential dwellings, associated outbuildings, and parking areas. These properties support some scattered Joshua trees and native vegetation amidst the anthropogenic features. Properties to the south are comprised of commercial buildings and graded parking lots. Properties to the East host a private residence on a large lot with scattered Joshua trees and some native vegetation, which could be considered low to moderate potential desert tortoise habitat.

3.2 Focused Survey for Burrowing Owl

Surveys for burrowing owl were conducted in alignment with CDFW guidance (2012), which is based on the Burrowing Owl Consortium Survey Protocols (California Burrowing Owl Consortium 1993). Following a literature review and an initial site visit (Phase I survey) on May 14, 2020, it was determined that the project area could contain potential burrowing owl habitat. Subsequently, Phase II surveys for live owls and their sign (whitewash, pellets, feathers, footprints) were conducted during the crepuscular hours of 0530-0700 on May 31, 2020. Weather was 17° Celsius, 85% cloud cover, and 0-2 mph winds at the beginning of the survey, and 19° Celsius, 75% cloud cover, and 0-2 mph winds at the end of the survey. Biologists walked north-south on contiguous belt transects at intervals of 20m to achieve 100% visual coverage of the site. In addition, during the surveys, all Joshua trees, chollas, and any areas of dense vegetation were carefully observed or inspected for evidence of other nesting bird activity.

3.3 Focused Survey for Desert Tortoise

Surveys were conducted for Mojave desert tortoise in accordance with USFWS published protocol (USFWS 2019). Surveyors walked north-south on contiguous belt transects at intervals of 10m to achieve 100% visual coverage of the site to document any live tortoises or their sign (burrows, scat, tracks, carcasses). Tortoise surveys occurred during the hours of 0700-0910. Weather was 19° Celsius, 75% cloud cover, and 0-2 mph winds at the beginning of the survey, and 22° Celsius, 60% cloud cover, and 0-2 mph winds at the end of the survey.

3.4 Vegetation Survey and Community Assessment

Although targeted special status plant surveys are beyond the scope of this report, subsequent to the focused desert tortoise surveys, biologists walked additional transects to inventory the plants on the site. This general assessment of the plant community occurred late in the reproductive season for annual plants, and most of the understory of non-native grasses, weedy species, and native annuals had already gone to seed and deteriorated.

Special note was taken of any prominent, perennial desert plants specifically subject to protection by the state (California Food and Agriculture Code, Regulated Native Plants Section 80073) and county (San Bernardino County Development Code, Desert Native Plant Protection Section 88.01.060). On the Pioneer Motel Expansion site, such species would include Joshua trees, cacti, acacias, yuccas (*Yucca* spp.), mesquites (*Prosopis* spp.), palo verdes (*Parkinsonia* spp.), and agaves (*Agave* spp.). To provide some perspective for future permitting and mitigation planning, the biologists completed a brief tally of Joshua trees and cacti in the remnant Joshua tree woodland habitat on parcels C and D.

4.0 RESULTS

4.1 Burrowing Owl

No live burrowing owls or their sign (pellets, whitewash, feathers, or tracks) were observed in the project area. Five small burrows were found, and California ground squirrels (*Otospermophilus beecheyi*) were seen entering and exiting many of these burrows (Table 3).

Burrow complex #01 had four entrances and was located on Parcel C under a fallen Joshua tree. It is unlikely a burrowing owl would use this burrow, as the entrances were small and recessed under the brush of the fallen Joshua tree. The remaining four burrows were located on Parcel B. Burrows #02 and #03 were under a large desert almond bush (*Prunus fasciculata*) growing along the edge of the graded parking area. These burrows would not be attractive to burrowing owls due to the overhanging branches over the burrow entrance. Burrow #04 was under a poured concrete performance stage and burrow #05 was at the base of a utility box located in the same parking area; these could be more attractive to a burrowing owl, as there was no brush surrounding the burrows. However, the burrows are relatively small (80-90 mm wide) and isolated.

Table 3. Burrows Located in Project Area

Sign #	Type	Class	Width (mm)	Height (mm)	Depth (< or >1m)	Notes
01	Burrow	4	120	140	Unknown	Likely rodent complex with 4 entrances of similar size under a fallen Joshua tree.
02	Burrow	4	115	135	Unknown	Beneath overhanging foliage of *P. fasciculata*. Ground squirrels entering and exiting this burrow.
03	Burrow	4	180	160	Unknown	Beneath same *P. fasciculata* foliage as B#02. Ground squirrels entering and exiting burrow.
04	Burrow	4	90	110	Unknown	Located under poured slab stage. Ground squirrels entering and exiting this burrow.
05	Burrow	4	80	100	Unknown	Likely rodent, at base of utility box in graded parking lot.

*Burrow class category rated as follows: 1- desert tortoise, recent use , 2- desert tortoise, good condition, 3- desert tortoise, deteriorated condition, 4- unlikely desert tortoise, good condition, 5- unlikely desert tortoise, deteriorated condition.

4.2 Desert Tortoise

No live tortoises or sign (burrows, scat, tracks, or carcasses) were observed during focused desert tortoise surveys. None of the five burrows recorded on-site had the distinctive half-moon shape associated with tortoise burrows and many were steeper than typical tortoise burrows, which tend to have a gentler slope (Burge, 1978, Berry and Murphy 2019). Additionally, most burrows had abrupt turns near the entrance of the tunnel, which is not characteristic of tortoise burrows (Burge, 1978, Berry and Murphy 2019).

4.3 Nesting Birds

A nesting bird survey was conducted during burrowing owl surveys. Two active passerine nests and six inactive passerine nests were observed on the project site (Table 4). The two active nests (#02 and #08) were attended by a house finch and house sparrow, respectively. Nest #06 was an abandoned nest containing one white egg and was not attended by an adult bird. However, nest #06 was in the same silver cholla as nest #02; nest #02 was attended by a house finch and contained four eggs and one newly hatched chick. It is likely nest #06 was an older, failed house finch nest that was no longer active. All nests were located on parcels C and D, except for nest #08, which was on parcel B.

Table 4. Results of Burrowing Owl and Nesting Bird Survey

Sign #	Type	Species	Notes
01	nest	unknown	Three broken eggs and shells- depredated. Unlikely eggshells would be present in nest if chicks had fledged. Located in cholla.
02	nest, bird	house finch	Four eggs and 1 newly hatched chick. House finch flushed from nest. Located in cholla.
03	nest	unknown	Empty nest, bird droppings on rim of nest, used this year; Most likely house finch or sparrow. Located in cholla.
04	nest	cactus wren	Unused nest, globe shaped with entrance hole, located in cholla.
05	nest	unknown	Degraded nest in cholla.
06	nest	house finch	Nest with 1 white egg in same silver cholla as nest #02.
07	nest	unknown	Old nest with some trash (twine, filaments from nylon rope) incorporated in lining. Located in cholla.
08	nest, bird	house sparrow	House sparrow taking nesting material to globe shaped nest with entrance hole; likely re-using abandoned cactus wren nest. Located in Joshua tree.

*Table shows nests located, but does not include all live birds observed. See Appendix A for a comprehensive list of bird species heard/observed on site.

Biologists also identified 13 species of birds by sight or sound while surveying the property (Appendix A). Birds were numerous and active on surrounding lands, throughout the project area, and especially around the flowering landscaping plants and corresponding irrigation system. No raptors were observed during the biological surveys, although surveys were completed during early morning hours before the onset of localized breezes typically used by many raptors for soaring flight. The surrounding area undoubtedly supports foraging and nesting sites for raptors. However, the nearest cliff habitat suitable for nesting raptors was observed nearly 1 kilometer off site, based on examination of topographic maps and a scan of the surrounding hills with binoculars.

4.4 Plants

Biologists walked meandering pedestrian transects throughout the site to identify the most prominent plant species present on the property. Appendix B provides a complete list of the plants observed in the Joshua tree woodland habitat on parcels C and D. The various ornamental native and exotic plants associated with the existing motel and graded parking areas (parcels A and B) are not included in this appendix.

No listed sensitive plant species were observed in the project area, which is concurrent with the results of the literature review and queries of agency data on sensitive plants in the area. However, surveys were completed late in the blooming season and many annual plants were already degraded and gone to seed.

Parcels A and B are cleared of most vegetation, but are sparsely landscaped with a mixture of native and non-native plants. Both of these parcels receive some amount of irrigation, with water fed through underground lines and delivered by drip systems, or delivered directly by hand with garden hoses. Vegetation on Parcel A is characterized by several large cottonwood trees, Mondell pine trees, manicured catclaw acacias, and desert willows (*Chilopsis linearis*), with other ornamental flowering plants around the border of the parcel. No Joshua trees were present on parcel A. Parcel B contains four mature Joshua trees and a small landscaped area containing some catclaw acacias, Mojave yucca (*Yucca schidigera*), mesquite trees, palo verdes, desert willows, various agaves, and other xeric landscaping shrubs.

Parcels C and D are a fragmented patch of largely undisturbed native Joshua tree woodland with an understory characterized by blackbrush, ephedra, silver cholla, and catclaw acacia. The ground cover is a thick mix of dried native annuals, prominently among them fiddleneck (*Amsinckia tessellata*) and notch-leaf phacelia (*Phacelia crenulata*), with a significant cover of invasive plants (*Bromus* spp., *Erodium cicutarium*., etc.). The northern and southern edges of the conjoined parcels have been previously disturbed, as evidenced by a lack of native shrubbery and presence of invasive Sahara mustard (*Brassica tournefortii*). On the southern edge of parcel C, there is an approximately 70 x 50 ft. area that was previously cleared. On the northern edge of parcel D, there is a continuous strip along the property line about 15 ft. in width that appears to have been mowed historically, though not recently. Both areas have sparse vegetation and host stands of Sahara mustard. Additionally, biologists noted

light vehicle (pickup, SUV) tire tracks in the northern section of parcel D, traveling into the northern section of parcel C. The tire tracks crushed vegetation, but likely did not kill it.

County and state ordinances apply to the protection of certain desert plants. During the biological surveys, biologists completed a brief tally of Joshua Trees and cacti on parcels C and D. Acacias were not counted on these parcels, as there were dozens of smaller acacias with a few stalks throughout the site; their evaluation was beyond the scope of this survey. There were fewer large acacia trees with multiple woody branches, however. On parcels A and B, cacti, acacias, yuccas, mesquites, palo verdes, and agaves were not counted because they are part of an irrigated landscaping regime in an area of frequent human use.

Joshua trees can at times grow clonal shoots that appear as if they are multiple smaller individuals growing beneath a larger tree (Esque et al. 2015, Sweet et al. 2019). Consequently, for this survey, any clusters within a 5-foot radius were counted as a single plant. On parcels C and D, there were approximately 27 Joshua trees taller than three feet and about 10 individuals shorter than three feet. There were approximately 22 *Opuntia* spp., 36 silver chollas, and five hedgehog cacti (*Echinocereus engelmenii*). No yuccas, mesquites, palo verdes, or agaves were present on Parcels C and D; their occurrence on parcels A and B are likely the result of human landscaping or preservation.

4.5 Additional Animal Species

Apart from insects, a few additional animal species were observed during the general biological surveys (Appendix A): Side-blotched lizard (*Uta stansburiana*), whiptail lizard (Aspidoscelis tigris), gopher snake (*Pituophis catenifer*), cottontail rabbit (*Sylvilagus audubonii*), jackrabbit (*Lepus californicus*), and California ground squirrel. None are special status species and all are commonly observed in Joshua tree habitat.

Large canid scat was also observed on site, indicating that both coyotes (*Canis latrans*) and domesticated dogs frequent the area. Indeed, during the site visit and the surveys, pedestrians were noted walking on adjacent dirt roads with dogs on leash. There were no signs of American badger (*Taxidea taxus*) or desert kit fox (*Vulpes macrotis*) on site. Horse (*Equus caballus*) droppings were noted at the western periphery of Parcel D along the edge of the dirt road that bounds the project site.

5.0 Impacts and Recommendations

5.1 General Impacts

The proposed Pioneertown Motel expansion outlined in this report would permanently alter approximately 2.52 acres of a fragmented Joshua tree woodland habitat (parcels C and D). The remaining adjacent 3.59 acres included in the proposal already host graded parking areas, a busy motel, and various storage and other outbuildings. As such, the biological impacts of this project are relatively minor, as the vegetated area to be cleared is about 2.52 acres and is already surrounded by human disturbance on semi-rural land. Clearing the vegetation will result in a loss of foraging and nesting habitat for birds, habitat for snakes and lizards, a decrease in vegetative cover, and potential loss of some of the Joshua trees, depending on project site plans.

5.2 Burrowing Owl

No further surveys (Phase III), nor mitigation for burrowing owl are recommended at this time, as no owl sign was observed and the few mammal burrows recorded on the property were not likely to attract owl use (CDFG 2012). While further surveys are not needed at this time, burrowing owls are highly mobile animals and could occur in the action area of the project in the future (Gervais et al. 2003, Rosier et al. 2006, Catlin et al. 2005). Therefore, it is recommended that pre-construction surveys be conducted for burrowing owl within 30 days prior to any ground-disturbing construction activities (CDFG 2012).

Burrowing owls primarily use abandoned mammal burrows in open terrain for nesting and roosting, and have been known to use badger, fox, coyote, tortoise, and ground squirrel burrows, among others (Gervais et al. 2008). Ground squirrels were observed using many of the burrows on-site, most of which were located in the graded parking area on Parcel B. However, all but two of the burrows were underneath large, dense shrubs, which is not an attractive location to burrowing owls. Additionally, burrowing owls prefer slightly larger holes in areas with multiple surrounding burrows where they can take shelter (Poulin et al. 2005, Smith and Belthoff 2001). Most of the burrows on-site are relatively small and sparsely distributed. The high pedestrian and vehicle traffic around the area is a moderate deterrent to owls. Although burrowing owls sometimes nest in isolated anthropogenic structures such as pipe culverts, piles of rubble, or stacked materials, there were no such features noted on the properties in this survey (Rosenburg et al. 2007).

5.3 Desert Tortoise

Surveys yielded no sign (burrows, scat, tracks, carcasses) that desert tortoise have recently been present in the area. The landscape proposed for development represents low to moderate predicted habitat potential for tortoise, considering its elevation, plant community structure, fragmented habitat, proximity to human disturbance, and surrounding human activities (Nussear et al. 2009, USFWS 2011).

It is unlikely desert tortoises would establish burrows on the site in the future due to proximity to human development, the limited amount of contiguous vegetation, and presence of domestic dogs in the area. A loss of this property as potential tortoise habitat does not appear to present a measurable impact to the overall range of the species. Therefore, no further mitigation measures for desert tortoise are recommended.

Although the site itself is unlikely to support resident desert tortoises, it is possible that a tortoise could travel through the site, and there may be resident tortoises in the vicinity. If a desert tortoise is observed during construction, all activities likely to adversely affect the animal should cease immediately. Both CDFW and USFWS agency personnel should be contacted to initiate a consultation regarding appropriate mitigation measures that may be implemented prior to resumption of further activities in the action area. The results of this survey are not an authorization for "take" of desert tortoise. The California Department of Fish and Wildlife and U.S. Fish and Wildlife Service are the only entities with authority to authorize the "take" of a desert tortoise.

Focused desert tortoise surveys were conducted on May 31, 2020 and results are deemed valid for a period of 12 months from date of survey. Should construction commence after May 31, 2021, an additional survey should be conducted to ensure compliance with USFWS guidance (USFWS 2019).

5.4 Additional Bird Species

It is likely that any birds displaced by construction activities would move off site and find suitable habitat to nest and forage, as the project footprint is small in relation to the available habitat in the surrounding landscape. However, if construction commences during the nesting season, it is recommended that qualified biologists perform nesting bird surveys immediately prior to the initiation of ground disturbance activities. Nesting birds are protected under the Migratory Bird Treaty Act (MBTA), although some non-native species such as starlings (*Sturnus vulgaris*) and house sparrows (*Passer domesticus*) are not subject to MBTA protections. Considering the number of nests and the mature Joshua trees and silver chollas on-site, it is highly likely that there will be multiple bird nests on the site during future breeding seasons.

If active nests are discovered during a survey, buffer areas of appropriate size should be maintained to exclude construction activities from the area until a qualified biologist has determined the nesting cycle is completed and ascertained the nest fate (fledging or failure). Nesting season in the Mojave Desert region of Southern California is often considered to be February 01– August 31, but is sometimes more abbreviated or runs later into September at higher elevations. It would be appropriate to contact government agency representatives for current guidance for this specific project site.

Some raptor species such as red-tailed hawks (*Buteo jamaicensis*) nest in Joshua trees, but it is unlikely raptors would nest in the project area due to its close proximity to human activity.

Additional avian Species of Special Concern (CDFW) that frequently nest in Joshua tree woodlands include: Le Conte's Thrasher, loggerhead shrike, and long-eared owl (*Asio otus*). The thrasher and shrike have a mild to moderate chance of nesting on-site, but proximity to human activity and domestic dogs reduces the chance of them nesting on the property. It is most likely that nests found on-site will be from non-sensitive passerines, followed by Le Conte's thrashers and loggerhead shrikes (both CDFW Species of Special Concern). Raptor nests such as long-eared owl, are highly unlikely to occur.

5.5. Mammals

Other sensitive mammal species with the potential to occur on-site are the desert kit fox, American badger, and pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*). No mitigation is recommended at this time for kit fox or badger as surveys found no sign (tracks, scat, fur, burrows). The surveys were conducted during the breeding period for these species (Zeiner et al. 1988) and like many other species, kit fox and badger are unlikely to colonize the project area in the future due to its small size, human-impacted surroundings, and prevalence of domesticated dogs and coyotes. The nearest CNDDB record of the pallid San Diego pocket mouse is approximately one mile away from the site and was recorded in 2002. No individuals were observed during the survey and there were few burrows of appropriate size for mice. While it is possible that they are on-site, no mitigation is currently recommended for this species.

5.6 Plants

During the development of the project, most of the existing Joshua trees would be intentionally preserved and incorporated into landscaping, but a majority of the vegetated understory on parcels C and D would be graded and removed. County and state protections exist for certain desert plants, and a permit is required for the removal of these plants in association with development. The following is the Desert Native Plant Protection Ordinance Section 88.01.060 as laid forth in the County of San Bernardino Development Code, Chapter 88.01 Plant Protection and Management:

§ 88.01.060 Desert Native Plant Protection

(a) Definitions. Terms and phrases used within this Section shall be defined in Division 10 (Definitions) and/or defined by the California Food and Agricultural Code. The California Food and Agricultural Code definition, if one exists, shall prevail over a conflicting definition in this Development Code.

(b) Applicability. The provisions of this Section shall apply to desert native plants specified in Subdivision (c) (Regulated Desert Native Plants) that are growing on any of the following lands, unless exempt in compliance with § 88.01.030 (Exempt Activities):

(1) Privately owned or publicly owned land in the Desert Region.

(2) Privately owned or publicly owned land in any parts of the Mountain Region in which desert native plants naturally grow in a transitional habitat.

(c) Regulated Desert Native Plants. The following desert native plants or any part of them, except the fruit, shall not be removed except under a Tree or Plant Removal Permit in compliance with § 88.01.050 (Tree or Plant Removal Permits). In all cases the botanical names shall govern the interpretation of this Section.

(1) The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:
   (A) Dalea spinosa (smoketree).
   (B) All species of the genus Prosopis (mesquites).
(2) All species of the family Agavaceae (century plants, nolinas, yuccas).
(3) Creosote Rings, ten feet or greater in diameter.
(4) All Joshua trees.
(5) Any part of any of the following species, whether living or dead:
   (A) Olneya tesota (desert ironwood).
   (B) All species of the genus Prosopis (mesquites).
   (C) All species of the genus Cercidium (palos verdes).

(d) Compliance with Desert Native Plants Act. Removal actions of all plants protected or regulated by the Desert Native Plants Act (Food and Agricultural Code §§ 80001 et seq.) shall comply with the provisions of the Act before the issuance of a development permit or approval of a land use application.

Additionally, the California Food and Agriculture Code, Division 23, Chapter 3: Regulated Native Plants, Section 80073 states:

§ 80073 Regulated Native Plants Section

The following native plants, or any part thereof, may not be harvested except under a permit issued by the commissioner or the sheriff of the county in which the native plants are growing:

(a) All species of the family Agavaceae (century plants, nolinas, yuccas).
(b) All species of the family Cactaceae (cacti), except for the plants listed in subdivisions (b) and (c) of Section 80072 which may be harvested under a permit obtained pursuant to that section.
(c) All species of the family Fouquieriaceae (ocotillo, candlewood).
(d) All species of the genus Prosopis (mesquites).
(e) All species of the genus Cercidium (palos verdes).
(f) Acacia greggii (catclaw).
(g) Atriplex hymenelytra (desert-holly).
(h) Dalea spinosa (smoke tree).
(i) Olneya tesota (desert ironwood), including both dead and live desert ironwood.

5.7 Conclusions

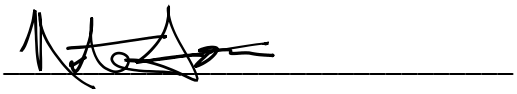
Consultation with relevant state and county agency personnel is advised when in the planning stages to determine the appropriate mitigation for removal or transplantation of the above listed desert plant species. Additionally, 30-day burrowing owl surveys and MBTA nesting bird surveys prior to groundbreaking activities are recommended. While focused desert plant surveys during the blooming season could be used to confirm whether any sensitive plants are present on-site, the general vegetation surveys and literature review presented in this report suggest a low probability of sensitive plants occurring on-site.

The biological surveys conducted for this project occurred at a discrete time in the season, and conditions have the potential to change on the site. As precipitation levels differ from year to year, annual plants will be more plentiful or more scarce. Depending on the level of human activity on the surrounding properties, animals may also become more common or rare to observe on the project footprint. At present, the project area is in a moderately disturbed, fragmented habitat with noticeable levels of human activity.

6.0 Certification

CERTIFICATION: “I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have no financial interest in the project.”

Liana Harp
Wilder Ecological Consulting, Inc.



Nate Jones
Wilder Ecological Consulting, Inc.

Appendix A
Animals Observed During Biological Surveys of the Pioneertown Motel Expansion Project Site (May 31, 2020)

BIRDS

California scrub jay	*Aphelocoma californica*
Gambel's quail	*Callipepla gambelii*
Costa's hummingbird	*Calypte costae*
Common raven	*Corvus corax*
Ladder-backed woodpecker	*Dryobates scalaris*
House finch	*Haemorhous mexicanus*
Bullock's oriole	*Icterus bullockii*
House sparrow	*Passer domesticus*
Phainopepla	*Phainopepla nitens*
Eurasian collared dove	*Streptopelia decaocto*
European starling	*Sturnus vulgaris*
Western kingbird	*Tyrannus verticalis*
Mourning dove	*Zenaida macroura*

REPTILES

Western whiptail lizard	*Aspidoscelis tigris*
Gopher snake	*Pituophis catenifer*
Side-blotched lizard	*Uta stansburiana*

MAMMALS

Black-tailed jackrabbit	*Lepus californicus*
California ground squirrel	*Otospermophilus beecheyi*
Desert cottontail	*Sylvilagus audubonii*

Appendix B
Plants Observed During Biological Surveys of the Pioneertown Motel Expansion Project Site (May 31 2020)

PLANTS

Cooper's Dyssodia	*Adenophyllum cooperi*
Cheesebush	*Ambrosia salsola*
Bristly fiddleneck	*Amsinckia tessellata*
Purple three-awn	*Aristida purpurea*
Sahara Mustard	*Brassica tournefortii*
Red brome	*Bromus rubens*
Cheatgrass	*Bromus tectorum*
Rattlesnake weed	*Chamaesyce albomarginata*
Blackbrush	*Coleogyne ramosissima*
California dodder	*Cuscuta californica*
Silver cholla	*Cylindropuntia echinocarpa*
Hedgehog cactus	*Echinocereus engelmannii*
California jointfir	*Ephedra californica*
Mormon tea	*Ephedra nevadensis*
Woolystar	*Eriastrum spp.*
Cooper's goldenbush	*Ericameria cooperi*
Buckwheat	*Eriogonum fasciculatum*
Redstem filaree	*Erodium cicutarium*
Mojave desert parsley	*Lomatium mohavense*
Desert wishbone-bush	*Mirabilis laevis*
Beavertail cactus	*Opuntia basilaris*
Pancake prickly pear	*Opuntia chlorotica*
Brown spined pricky pear	*Opuntia phaeacantha*
Notch-leaf phacelia	*Phacelia crenulata*
Desert mistletoe	*Phoradendron californicum*
Desert almond	*Prunus fasciculata*
Paperbag bush	*Scutellaria* mexicana
Catclaw acacia	*Senegalia greggii*
Desert globemallow	*Sphaeralcea ambigua*
Parry's wire lettuce	*Stephanomeria parryi*
Wire lettuce	*Stephanomeria pauciflora*
Joshua tree	*Yucca brevifolia*

Appendix C
Directional Photos of the Site
(May 31 2020)

Parcel A, southeast corner looking towards center of property.

Parcel A, southwest corner looking towards center of property.

Parcel A, northwest corner looking towards center of property.

Parcel A, northeast corner looking towards center of property.

Parcel B, southeast corner looking towards center of property.

Parcel B, southwest corner looking towards center of property.

Parcel B, northwest corner looking towards center of property.

Parcel B, northeast corner looking towards center of property.

Parcel C, southeast corner looking towards center of property.

Parcel C, southwest corner looking towards center of property.

Parcel C, northwest corner looking towards center of property.

Parcel C, northeast corner looking towards center of property.

Parcel D, southeast corner looking towards center of property.

Parcel D, southwest corner looking towards center of property.

Parcel D, northwest corner looking towards center of property.

Parcel D, northeast corner looking towards center of property.

Appendix D
General Photos of the Site
(May 31 2020)

Active house finch nest in silver cholla (parcel C/D).

Burrow #01 under fallen Joshua tree (parcel C/D).

Burrow #04 under performance stage (parcel B).

Landscaped area around performance stage (parcel B).

Previously cleared area on south end of parcel C with Sahara mustard.

Example of scattered trash observed on parcels C and D.

Drainage ditch on southeast corner of parcel B.

Drainage on parcel B, closeup view.

Drainage on east side of Curtis Rd. across from parcel B**.**

Appendix E
Field Data Sheets

Page 1 of 1

Burrowing Owl/Nesting Bird Survey Datasheet

Project Surveyed: Pioneertown Motel Expansion Date: 31 MAY 2020
Survey Type (spacing/direction): 20 m. - NORTH / SOUTH

Surveyor(s): Liana Harp, Nate Jones
Start Weather: 17°C, 85% CC, 0-2 mph wind Start Time: 0530
End Weather: 19°C, 75% CC, 0-2 mph wind End Time: 0700

County: San Bernardino Land Owner: Private Land Use: unused lot / motel
Elevation: 1,201 m. Land form (bajada, flat, etc): flat Datum/Zone: WGS84 UTM Zone 11S
Visible Disturbance: ☒ Trash ☒ Roads ☒ Buildings ☐ Ammunition ☒ Other landscaping
Dominant Vegetation Type: Joshua Tree scrub Dominant Soil Type: gravelly sandy loam

Sign #	Type (Bird, Nest, BUrrow, Scat, Tracks)	Species	Width (mm) (burrows)	Height (mm) (burrows)	Depth (>1m or < 1m) (burrows)	Easting (UTM WGS 84)	Northing (UTM WGS 84)	Notes
01	N	UNK				546 685	377 9912	NEST W/ 3 BROKEN EGG SHELLS - DEPREDATED?
02	N/B	HOFI				546 681	377 9879	NEST W/ 4 EGGS + 1 NEWLY HATCHED CHICK
03	N	UNK				546 676	377 9894	EMPTY NEST, USED THIS YEAR
04	N	CACW?				546 670	377 9923	UNUSED NEST, LIKELY CACTUS WREN
05	N	UNK				546 666	377 9877	DEGRADED NEST IN CHOLLA
06	N	HOFI?				546681	377 9879	NEST W/ 1 EGG IN SAME CHOLLA AS N #02
07	N	UNK				546658	377 9863	OLD NEST W/ TRASH, POSSIBLY THRASHER?
08	N/B	HOSP				546 654	377 9844	HOUSE SPARROW TAKING NESTING MATERIAL TO NEST IN J. TREE

Page 1 of 1

Desert Tortoise Survey Datasheet

Project Surveyed: Pioneertown Motel Expansion Date: 31 MAY 2020
Survey Type (spacing/direction): 10 m. - NORTH/SOUTH

Surveyor(s): Liana Harp, Nate Jones
Start Weather: 19°C, 75% CC, 0-2 mph wind Start Time: 0700-
End Weather: 22°C, 60% CC, 0-2 mph wind End Time: 0910

County: San Bernardino Land Owner: Private Land Use: unused lot/motel
Elevation: 1,201 m. Land form (bajada, flat, etc): flat Datum/Zone: WGS84 UTM Zone 11S
Visible Disturbance: ☒ Trash ☒ Roads ☒ Buildings ☐ Ammunition ☒ Other landscaping
Dominant Vegetation Type: Joshua Tree scrub Dominant Soil Type: gravelly sandy loam

Sign #	Type (Burrow, Tortoise, Carcass, Scat, TRacks)	Class (1-5)	Width or MCL (mm)	Height (mm) (burrows)	Depth (>1m or < 1m) (burrows)	Easting (UTM WGS 84)	Northing (UTM WGS 84)	Excavated?	Notes
01	B	4	120	140	unk	546737	3779897	N/A	likely rodent complex w/ 4 entrances under fallen J. Tree.
02	B	4	115	135	unk	546736	3779824	N/A	Likely rodent/ground squirrel, under P. fasciculatum.
03	B	4	180	160	unk	546733	3779822	N/A	"
04	B	4	90	110	unk	546723	3779831	N/A	same bush as B#02 Rodent hole under poured slab (stage).
05	B	4	80	100	unk	546746	3779797	N/A	Rodent hole along electric box.

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